



The NZHIA is all about promoting the economic, environmental, health and social benefits of a NZ hemp industry (iHemp.)

A new agricultural crop producing a range of iHemp products in rural New Zealand will drive bioregional development.

The exciting thing for New Zealand is that the prohibition on cannabis has meant minimal work has been done on understanding the qualities of the plant and how to commercialise them. The iHemp raw materials can be used in a wide range of products, all of which need to be further researched and developed in to suitable export markets.

The products derived from the seed, fibre, roots and leaf can be used in all sorts of industries.

- Nutrition
 - Hemp seed super food, seed oil, teas, milks, juices, protein, flour, pasta, ice cream
 - Production will scale when we have access to the human food market
 - The secondary market for processed hemp seeds exists
- Construction
 - Insulation, blocks, fibre board, caulking, insulation and other building products, such as paint varnishes and oils.
 - Great thermal, acoustic, insulation and fire resistant qualities
 - Interior and exterior walls, complete building systems are possible
 - Hempcrete uses a mixture of water, lime and hurds from the stems to make a light weight concrete material that does not require reinforcing.
- Composite
 - Bio composite, plastics, packaging, high tech automotive parts and linings
 - Furniture, decking, car parts, 3D printing, graphene
- Textiles
 - Rope, fabrics – clothing and soft furnishings, industrial fibre, filters and absorbents
 - Fibre is naturally anti-static, anti-bacterial, antifungal and antimicrobial
 - Will stop 95 % of the UV light, great for uniforms and work clothing
 - Horticultural use, mulch, geo textiles and horse bedding
- Paper
 - Paper, packaging, craft, canvas, stationary, technical and speciality papers
 - Short and long fibre for pulp & paper making, craft, cardboard, newsprint, canvas
- Fuel and oil industries
 - Lubricants, thinners, lighting oil, cosmetics
 - Bio Fuel, charcoal, batteries and cells
 - low ash content, great BTU value, clean burning
- Medical
 - CBD and other non psychoactive cannabinoids have been identified and along with the psychoactive cannabinoid THC are now being developed into medicines and nutraceuticals.
 - Access to the whole plant is important so all the cannabinoids, flavourids, terpenes, minerals and other compounds found in iHemp can be used.
 - The farmers must be allowed to supply their iHemp to make hemp products.
- Growing
 - 90-120 day crop, ideal in rotation requires little agri-inputs
 - Can lift heavy metals and phyto-remediate polluted soils
 - Can produce tonnes of seed, fibre and dry matter, annually

iHemp has a lot to offer locals

- A sustainable industry
- Huge potential to build capacity
- Wide variety of research and development opportunities
- Utilising expertise and skills in industries who can use seed and natural fibre.
- Demand for new Industry with export potential
- Employment and business opportunities
- Co-operatives and regional development
- A growing business opportunity

Growing on Farm

- Positive aspects of growing a 120 day crop in rotation in rural New Zealand
- Producing a fibre, seed or dual purpose (fibre and seed) crop
- Plant variety protection, so breeders create better varieties.
- Code of conduct within the industry to ensure best practice is followed and food safety is maintained.
- By growing for phytoremediation purposes it can clean polluted soils and break up compaction.
- Breaking the harvested crop into separate raw material commodities
 - Seeds and leaf – Clean, dry and store
 - Stems – Decorticate into hurd and fibre, grade and store
 - Processed locally avoid transporting bulky raw materials
 - Produce and manufacture hemp products locally

The Co-op business model

This is a great business arrangement widely used in New Zealand it has been successful in facilitating the emergence of services on the farm and in rural towns:

- To provide machinery to grow and harvest iHemp.
- Supply facilities to clean, dry and store seeds
- Create industries to process and add value to iHemp
- Sell and transport the raw materials to the producers
- Added value opportunities for locals.
- Quality product sold to distributors and retailers for the local and export markets

Bio regional development; based on adding value in rural New Zealand.

- Requires capital investment
- Will utilise and build capacity
- Utilising research and development on a wide variety of end products
- Achieving economies of scale in production and export of iHemp products

Funding needs to be directed to projects with industry support and meet consumer demand.

Looking at sustainable outcomes for rural New Zealand, people, businesses and the environment.

NZHIA – 29 February 2016

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The following chart has been extract from the 1998 NZHIA Publication – The 5 Minute Guide to Industrial Hemp. Chart Source: Nova Institute 1995, since this chart was created many more uses have been identified, such as 3D printing, graphene, bioremediation and batteries

